10X Auto Focusing Full HD-SDI Box

Feature:

- 1080P@30 Full HD with SDI technology
- 1/2.7" (2 Mega Pixel) High Sensitivity Image Sensor
- Advanced Ambarella A2i (Full HD) DSP
- Auto Focusing Lens and built-in IR-CUT
- 10X Optical Zoom
- OSD Menu Support

Installation:

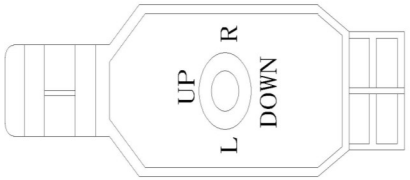
- To prevent shock or damage to the waterproof body, tighten all the screws and cover
- Adjust the visor to prevent the lens from direct sunlight
- Do not directly touch the front glass. To clean the dust, wipe with soft cloth with alcohol.
- Don't install it in the place where dithering and shake often
- Don't install it in the place where temperature is above 50°C or below –20°C
- Video line tie-in and DC tie-in must be avoided to touch water.
- If abnormal, please power off and contact the manufacturer

Note: Non-regulated power supply may cause camera damaged.

Technical Specifications:

Model	IV-SD1420AMO
Image Sensor	1/2.7" (2 Mega Pixel) High Sensitivity Image Sensor
Number of Pixels	1080P Mega Pixel (2M)
DSP	Ambarella A2i and A7L (Full HD)
Resolution	1080p 25/30, 720p 50/60, 1080i 50/60 (A2i) 1080p60 (A7L)
Video Output	Digital: HD-SDI
Signal Noise Ratio	TBD
Optical Zoom	10X Optical Zoom/F1.88~F2.8/ f=6.44mm(W)~61.35mm(T)
Digital Zoom	2X
Horizontal Angel	49.108°(W)~5.255°(T)
Focus Mode	Power Focus
Focus Distance	10cm~infinite (Wide), 1m~infinite (Tele)
IRIS/IR CUT	DC IRIS & IR Cut for Day & Night Camera
Zoom/Focus	Motorized with two motors (One for Zoom/One for Focus)
Exposure Mode	Auto, Spot AE
Picture Effect	Negative Effect/ B&W Effect
Freeze	Yes
Electronic Shutter	1/30 to 1/10000 (auto-mode)
Auto Gain Control	Auto/ Manual (16 levels)
White Balance	Auto/ Cloudy/ Tungsten/ Fluorescent/ Daylight (Color Temperature: 2000~9500K)
Exposure Compensation	Yes
Backlight Compensation	Yes
Montion Detection	Yes
Privary	Yes
True Day& Night	Yes, Auto ICR
Mirror	Yes (Horizontal & Vertical)
OSD Language	Chinese/ English
Power Supply	DC12V
Communication	RS485, Baud rate: 9.6Kb/s, 19.2Kb/s, 38.4Kb/s, Stop Bit: 1bit
Working Temperature	0°C~50°C
Storage Temperature	- 20°C~60°C
Dimension	109(L)*58(w)*62(H)mm
Weight	375g

External OSD Opertation



Press **ENTER** to open the main menu. Please note to press key "SAVE" to operate your changes on OSD MENU before exit.
Use left or right with Enter to operate the submenu of each item listed as follows:

```
SETUP  MENU
    LENS                AUTO
    SHUTTER/AGC         AUTO
    WHITE BAL           ATW
    BACK LIGHT          OFF
    PICT ADJUST
    D-WDR               OFF
    MOTIONDET           OFF
    NEXT
    EXIT                SAVEALL
```

```
SET UP MENU
    LENS……..AUTO/MANUAL
    SHUTTER/AGC…….AUTO/MANUAL
    WHITEBAL…….ATW/PUSH/USER1/USER2/
                ANTI CR/MANUAL/PUSH LOCK
    BACKLIGHT……..OFF/BLC/HLC
    PICK ADJUST
    ATR……OFF/ON
    MOTION DET……OFF/ON
    NEXT
    EXIT……SAVE ALL
```

```
SETUP  MENU(NEXT)
    PRIVACY             OFF
    DAY/NIGHT           Auto
    2DNR
    CAMERA ID           OFF
    SYNC                INT
    LANGUAGE            ENGLISH
    CAMERA RESET
    BACK
    EXIT                SAVE ALL
```

```
SET UP MENU(NEXT)
    PRIVACY……...OFF/ON
    DAY/NIGHT…….AUTO/EXIT1/EXIT2/COLOR/B/W
    Y/C  Y/C/OFF
    CANMERA ID……OFF/ON
    SANC……..INT
    LANGUAGE……Chinese, English , Japanese, Germen
                French,Russian,Portuguese, Spanish.
    CAMERA RESET
    NEXT
    EXIT……SAVE ALL
```

```
LENS
   TYPE             DC
    MODE            AUTO
    SPEED           80
   RETURN
```

```
LENS(AUTO IRIS)
  TYPE……DC/VIDEO
    MODE……AUTO/OPEN/CLOSE
  SPEED……..0~255
   RETURN
```

```
SHUTTER/AGC……AUTO
    HIGH LUMINANCE
    MODE                SHUT AUTO IRIS
    BRIGHTNESS          32
    LOW LUMINANCE
    MODE                AGC
    BRIGHTNESS          X0.5
    RETURN
```

```
SHUTTER/AGC(AUTO SET UP)
    HIGH LUMINANCE
    MODE……..SHUT+AUTO IRIS/AUTO IRIS
    BRIGHTNESS ……..0~255
    LOW LUMINANCE
    MODE ……..AGC/OFF
    BRIGHTNESS……X0.25,X0.5,X0.75X1.0
    RETURN
```

```
SHUTTER/AGC……MANUAL
    MODE            SHUTTER+AGC
    SHUTTER         1/50
    AGC             6.0
    RETURN
```

```
SHUTTER/AGC(MANUAL SET UP)
    MODE……..SHUTTER+AGC
    SHUTTER……..1/50(1/10000~1/50)
    AGC……6.0(6.0~44.8)
    RETURN
```

```
WHITEBAL
    SPEED               239
    DELAY CNT           1
    ATWFRAME            X2.0
    ENVIRNMENT          IN-
DOOR
    RETURN
```

```
WHITE BAL (ATW)
    SPEED ……239(0~255)
    DELAY CNT……..1(0~255)
    ATW FRAME……..X2.0(X1.5,X2,X0.5,X1.0)
    ENVIRONMENT……..INDOOR/OUTDOOR
    RETURN
```

```
PICK ADJUST             OFF
    MIRROR              0
    BRIGHTNESS          128
    CONTRAST            128
    SHARPNESS           128
    HUE                 128
    GAIN
    RETURN
```

```
PICK ADJUST
    MIRROR…….. ……OFF/ON
    BRIGHTNESS…….. …..0(0~255)
    CONTRAST……130(0~255)
    SHARPNESS……140(0~255)
    HUE……120(0~255)
    ..GAIN……140(0~255)
    RETURN
```

```
MOTIONDET ……..OFF/ON
   RETURN
```

When access ON,press ENTER to confirm submenu to set up the motion area and sensitivity

```
ATR
    LUMINANCE           MID
    CONTRAST            MID
    RETURN
```

```
ATR(ON)
    LUMINANCE……LOW/MID/HIGH
    CONTRAST……LOW/MID LOW/MID
                /MID HIGH/HIGH
    RETURN
```

```
PRIVACY……..OFF/ON
   RETURN
```

When access ON,press ENTER to confirm submenu to set up the privacy area

```
DAY/NIGHT
    BURST               OFF
    DELAY CNT           1
    DAY→NIGHT           2
    NIGHT→DAY           3
    RETURN
```

```
DAY/NIGHT(AUTO)
    BURST ……OFF/ON
    DELAY CNT……..1(1~255)
    DAY→NIGHT……...2(1~255)
    NIGHT→DAY……3(1~255)
    RETURN
```

```
2-DNR
    NRMODE              Y/C
    Y LEVELC            001
    C LEVEL             004
    RETURN
```

```
NR
   NR MODE……...OFF/C/Y/YC
    Y LEVEL
    C LEVEL
    RETURN
```